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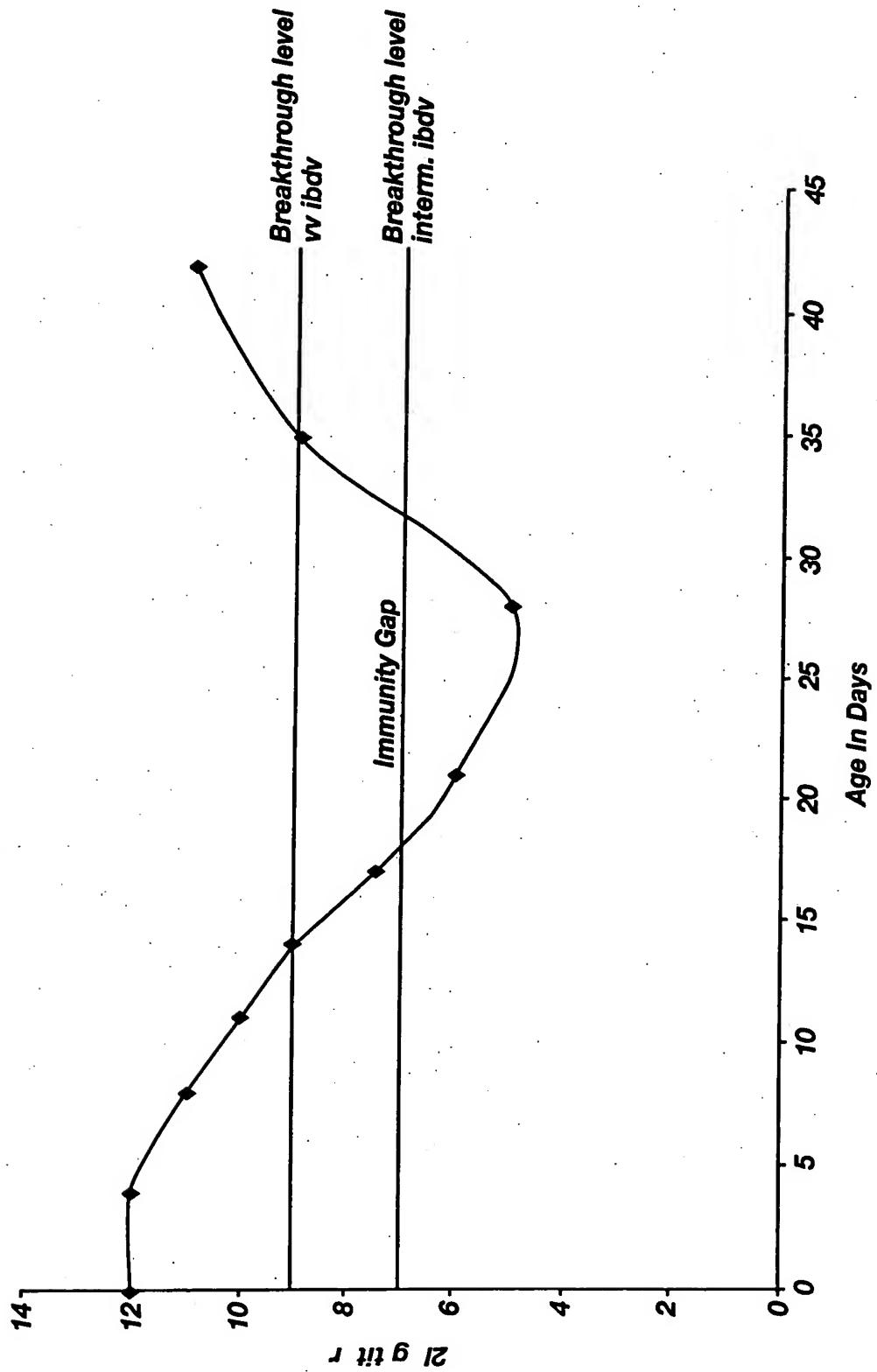


FIG. 1

CONSENSUS:	ggatacga	ggtctgacc	cgggggagtc	acccggggac	aggygwcaa	ggycctgttc	60
CEF94-A:	.....	.....	.....	.....	...C.t...	..t.....	60
D6948-A:	.....	.....	.....	.....	...t.a...	..C.....	60
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	caggatgga	ctctctcttc	tacaaygcta	tcattgatgg	tyagtagaga	tcagacaaac	120
CEF94-A:	.....	.....	...C.....	.....	..C.....	.....	120
D6948-A:	.....	.....	...t.....	.....	..t.....	.....	120
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	gatcgcagcg	atgacraacc	tgcaagatca	aaccaaacag	attgttcctg	tcatacggag	180
CEF94-A:	.....	...a.....	.....	.....	.....	.....	180
D6948-A:	.....	...g.....	.....	.....	.....	.....	180
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	ccttctgatg	ccaacaaccg	gaccggcgctc	cattccggac	gacaccctrg	agaagcacac	240
CEF94-A:	.....	.....	.....	.....	.....g.	.....	240
D6948-A:	.....	.....	.....	.....	...a.	.....	240
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tctcagggtca	gagacctcga	cctacaattt	gactgtgggg	gacacagggt	cagggctaata	300
CEF94-A:	.....	.....	.....	.....	.....	.....	300
D6948-A:	.....	.....	.....	.....	.....	.....	300
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tgtcttttttc	cctggwttcc	ctgggtcaat	tgtgggtgct	cactacacac	tgcagagcaa	360
CEF94-A:	.....	...a.....	.....	.....	.....	.....	360
D6948-A:	.....	...t.....	.....	.....	.....	.....	360
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tgggaactac	aagttcgatc	agatgctcct	gactgcccag	aacctaccgg	ccagytacaa	420
CEF94-A:t....	420
D6948-A:C....	420
TY89-A:	-----	-----	-----	-----	-----	-----	

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FIG. 2B

CONSENSUS:	cacaaagcctc	agcrtygggg	gagarctcgt	gtttcaaaca	agcggtccamg	gccttrtact	900
CEF94-A:	.....	...g.t...	....g....	.....	.....C....	.....g....	900
D6948-A:	.....	...a.C...	...a....	.....	.....a....	.....a....	900
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	gggygcyacc	atctacctya	taggctttga	tgggacwgcg	gtaatcacca	grgctgtggc	960
CEF94-A:	...C.C...	.....C....	.....	....a....	.....	...g.....	960
D6948-A:	...t.t...	.....t....	.....	....t....	.....	...a.....	960
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	cgcaracaat	gggctracgr	cgggcacyga	caacctttwg	ccattcaatm	ttgtgattcc	1020
CEF94-A:	...a.....	....g...a	.....C....	.....t..	.....a	.....	1020
D6948-A:	...g.....	....a...g	.....t..	.....a..	.....C	.....	1020
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	aacmarcgag	ataaccacgc	caatcacatc	catcaaaactg	gagatagtga	cctccaaaag	1080
CEF94-A:	...a.a...	.....	.....	.....	.....	.....	1080
D6948-A:	...C.g...	.....	.....	.....	.....	.....	1080
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tggtggtcag	gcrgggggtc	agatgtcrtg	gtcrgcaagw	gggagcctag	cagtgacgat	1140
CEF94-A:	.....	...a.....	.....g..	...g.....a	.....	.....	1140
D6948-A:	.....	...g.....	.....a..	...a....t	.....	.....	1140
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	ccayggtggc	aactatccag	gggccctccg	tcccgtcacr	ctagtrgcct	acgaaagagt	1200
CEF94-A:	...t.....	.....	.....	.....g...	.....	.....	1200
D6948-A:	...C.....	.....	.....	.....a...	.....	.....	1200
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	ggcaacagga	tcygtcggtta	cggtcgcygg	ggtgagcaac	ttcgagctga	tcccaaatcc	1260
CEF94-A:	.....	...C.....	.....t..	.....	.....	.....	1260
D6948-A:	.....	...t.....	.....C..	.....	.....	.....	1260
TY89-A:	-----	-----	-----	-----	-----	-----	

CONSENSUS:	cgaggtagtc	gcgaatctrt	tycaggtgcc	ccagaatccy	gtagtcgacg	ggattcttgc	1740
CEF94-A:	.....	.....a.	C.....	.....C	.....	.....t..	1740
D6948-A:	.....	.....g.	t.....	.....t	.....	.....C..	1740
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	ttcacctggg	rtactccgg	gygcacacaa	cctcgactgc	gtgttragag	agggtgccac	1800
CEF94-A:	.....g.	.....t.	.....	.....a.	.....	.....	1800
D6948-A:	.....a.	.....	C.....	.....g.	.....	.....	1800
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	gctattccct	gtggyatya	cgacagtga	agaygccatg	acacccaaag	caytgaacag	1860
CEF94-A:	.....	.....t.t.	.....	...C.....	.....	...t.....	1860
D6948-A:	.....	...C.C.	.....	...t.....	.....	...C.....	1860
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	caaaatgttt	gctgtcattg	aaggcgtgcg	agaagayctc	caacctccwt	ctcaaaagagg	1920
CEF94-A:	.....	.....	.....	...C.....	.....t..	.....	1920
D6948-A:	.....	.....	.....	...t.....	...a.....	.....	1920
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	atccttcata	cgaactctct	cyggacayag	agtctatgga	tatgctccag	atgggggtact	1980
CEF94-A:	.....	.....	t.....C.	.....	.....	.....	1980
D6948-A:	.....	.....	C.....t.	.....	.....	.....	1980
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	tccactggag	actgggagag	aytacaccgt	kgtcccaata	gatgatgtct	gggacgacag	2040
CEF94-A:	.....	.....	C.....	t.....	.....	.....	2040
D6948-A:	.....	.....	t.....	g.....	.....	.....	2040
TY89-A:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	cattatgctg	tccaaagayc	ccatacctcc	tattgtggga	aacagyggaa	ayctagccat	2100
CEF94-A:	.....	.....t.	.....	.....	...t....	...t.....	2100
D6948-A:	.....	...C.	.....	.....	...C....	...C.....	2100
TY89-A:	-----	-----	-----	-----	-----	-----	

FIG. 2E

CONSENSUS:	agcttacatg gatgtgttc gacccaaagt cccmatccat gtggcyatga cgggagccct	2160
CEF94-A:	.....	2160
D6948-A:	.....a.....t.....	2160
TY89-A:	.....C.....C.....	2160
CONSENSUS:	caaygcytrt ggcgagattg agaamgtrag ctttagaagc accaagctcg ccaactgcaca	2220
CEF94-A:	...t..t.g.....	2220
D6948-A:	...C..C.a.....	2220
TY89-A:	.....C.g.....	2220
CONSENSUS:	ccgacttggc ctyaagtgg ctggtcccgg wgcattygay gtraaacacg ggyccaactg	2280
CEF94-A:	.....t.....	2280
D6948-A:	.....C.....	2280
TY89-A:	.....t.....	2280
CONSENSUS:	ggcracgtty atcaaacgtt tycctcaca tccmcgmga c tgggacaggy tmccytacct	2340
CEF94-A:	...a.....C.....	2340
D6948-A:	...g.....t.....	2340
TY89-A:	.....C.....	44
CONSENSUS:	caacctwccm tayctyccac cmamwgcwgg acgycagtwc sayctkgccm tggchgchtc	2400
CEF94-A:	.....a..a..C..t.....	2400
D6948-A:	.....t..a..C..t.....	2400
TY89-A:	.....t..C..t..C.....	104
CONSENSUS:	mgagttcaaa gagaccocmg aactcgarr ygcygtsmgw gcmatggamg cwgcwgcmaa	2460
CEF94-A:	a.....C.....	2460
D6948-A:	a.....C.....	2460
TY89-A:	C.....a.....	164
CONSENSUS:	cgtsgaccca ytrttccrmt cwgcdctcmr bgtsttcatg tggytggaag araaygggat	2520
CEF94-A:	...g.....C.a.....aa..t..a..ag t..g.....	2520
D6948-A:	...g.....C.g.....aa..t..g...ag C..g.....	2520
TY89-A:	...C.....t.g....gc..a..t...ca g..c.....t.....	224

FIG. 2F

CONSENSUS: tgtracygay atggcyaaact tcgcmctcag cgaccggaac gcmcaymgga tgmrraat				2580	
CEF94-A:	...g..t..c	....a....	...C..tc...	..Cga....	2580
D6948-A:	...g..t..t	....C....	...C..tc...	..Cgc....	2580
TY89-A:	...a..C..C	....t....	...C....	..a..ca...	284
CONSENSUS: ycthgcaay gcwccmarg cmgmgagcaa gtcgcaragr gccaaagtayg gsacrgcwgg				2640	
CEF94-A:	t..t.....C	..a..a..a..	..a..C....	...a..g	2640
D6948-A:	t..C.....C	..a..a..a..	..a..C....	...a..g	2640
TY89-A:	C..a.....t	..t..C..g..	..C..a....	...g..g	344
CONSENSUS: ctacggagtg gaggcymgrg gccccacdcc agargargca cagagggara aagacacacg				2700	
CEF94-A:	.....	...tc.g..	....a..	...g..a..	2700
D6948-A:	.....	...CC.g..	....t..	...g..a..	2700
TY89-A:	.....	...ta.a..	....g..	...a..g..	404
CONSENSUS: gatctcmaag aagatggara cbatgggcat ctacttygca acaccrgaat gggtagcaact				2760	
CEF94-A:	.....a...	.....g..	..C.....	...t...	2760
D6948-A:	.....a...	.....g..	..t.....	...t...	2760
TY89-A:	.....C...	.....a..g	.....C...	...g...	464
CONSENSUS: caayggggcac cgrggsgccaa gccccggcca gctvaagtac tggcaraaca camgagaaat				2820	
CEF94-A:	...t.....	..a..g...	.....	...g...	2820
D6948-A:	...t.....	..g..g...	.....	...g...	2820
TY89-A:	...C.....	..a..C...	.....	...a...	524
CONSENSUS: accdgahccm aacgaggact aycyagacta ygtgcaygcr gagaagagcc ggttggrtc				2880	
CEF94-A:	...g..C..a	.....	..t.....	..C....t..a	2880
D6948-A:	...t..t..a	.....	..C....t..a	.....	2880
TY89-A:	...a..a..C	.....	..C....t..a	.....	584
CONSENSUS: agaagaacar rtcytaaggg cagcyacgtc gatctacggg gctccaggac aggcwgarcc				2940	
CEF94-A:	.....a..a..C	.....	...t....	.....	2940
D6948-A:	.....a..a..C	.....	...t....	.....	2940
TY89-A:	.....g..g..t	.....	...C....	.....	644

FIG. 2G

```

CONSENSUS: accccaagcy ttcatagacg aagtygccar rgtctatgaa atcaaccatg grcgtggycc 3000
CEF94-A:   .....t .....t....a a .....a .....a .....C.. 3000
D6948-A:   .....C .....C.....a a .....C.....g .....C.. 3000
TY89-A:   .....C .....C.....g g .....C.....g .....t.. 704

CONSENSUS: maaccargar cagatgaarg aytgctctct gactgcgatg gagatgaagc atcgcaatcc 3060
CEF94-A:   a.....a.a .....a. t.....t. ......... 3060
D6948-A:   C.....a.a .....a. t.....C. ......... 3060
TY89-A:   a.....g.g .....g. C.....C. ......... 764

CONSENSUS: caggcgggct cyaccaaagc cmaagccaaa acccaatgct ccawcacaga gacccctgg 3120
CEF94-A:   .....t .....C.....C.....a .....a ..... 3120
D6948-A:   .....C .....C.....C.....a .....a ..... 3120
TY89-A:   .....C .....C.....a .....t .....t ..... 824

CONSENSUS: wcggtgggc cgctggatca ggrcbgtctc tgaaggagac ytkgagtgag gywcctggga 3180
CEF94-A:   t.....t .....a.C.....t.....C.t.....ta ..... 3180
D6948-A:   t.....t .....g.t.....t.....C.t.....ct ..... 3180
TY89-A:   a.....t .....a.g.....C.....t.g.....ct ..... 884

CONSENSUS: gtctcccgc accaccgcg caggygtgga caccaattmr kmmhtaswrm atycsaaatt 3240
CEF94-A:   .....t .....t.....t.....Cg gact..caac ..C.C..... 3240
D6948-A:   .....t .....C.....C.....cg gcca..caac ..C.C..... 3240
TY89-A:   .....t .....t.....aa tcac..gtga ..t.g..... 944

CONSENSUS: ggatccgttc gcgggtcccc 3260
CEF94-A:   ..... 3260
D6948-A:   ..... 3260
TY89-A:   ..... 964
```

CONSENSUS: ggatacgaatg ggtctgacc tctgggagtc acgaattaac gtggctacta ggggygatrm 60
 CEF94-B:
 D6948-B:t...gc 60

 CONSENSUS: ccrccgctrg ctgccacggt agtggctcct ctcttctgat attcttrccac catgagtgc 120
 CEF94-B: ..g.....
 D6948-B: ..a.....

 CONSENSUS: rttttcaaya gtccacaggc gcgaagcamg atmtcagcag cgttcggcac aaagcctacw 180
 CEF94-B: a.....C.....
 D6948-B: g.....t.....

 CONSENSUS: gctggacarg aytggaaga actcytgatc cctaargtyt gggtgccacc tgaggatccs 240
 CEF94-B:a..C.....
 D6948-B:g..t.....

 CONSENSUS: ytkgccagcc ctagtgcwct ggcmaagttc ctcagrgara acggctacaa rrttytgacg 300
 CEF94-B: c.t.....
 D6948-B: t.g.....

 CONSENSUS: ccacgggtctc trccygagaa tgaggagtat gagaccgayc aaatactccc wgacytagcw 360
 CEF94-B:g..C.....
 D6948-B:a.t.....

 CONSENSUS: tggatgmgrc agatagargg rgctgtttta aaaccmacyc tatctctccc yattggagay 420
 CEF94-B:C.a.....
 D6948-B:a.g.....

 CONSENSUS: caggagtact tcccwaarta ctaccaaca caycgcccka gcaaggaraa gcccaatgcg 480
 CEF94-B:
 D6948-B:

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FIG. 3B

CONSENSUS: taccgcgcmg ayatcgcayt actcaagcag atgatyatcy tgtttctcca ggtccmgag 540
CEF94-B:a. .C.....C.t...ca... 540
D6948-B:C. .t.....t.C...tC... 540

CONSENSUS: gccammgakr rcctwaarga tgargtmacc ctmytraccc aaacatwag rgayaargcc 600
CEF94-B:ac..gg g...a..g... ..a..a... ..ct.g... ..a...a.. g..c..g... 600
D6948-B:ca..ta a...t..a.. ..g..C... ..ac.a... ..t...t... a..t..a... 600

CONSENSUS: tayggragt ggcactacat gggacargcm acymgacttg tkgcyatgaa rgaggtygcc 660
CEF94-B: ..t..a....a..a .tc..... .g..C..... g.....C... 660
D6948-B: ..C..g....g..c .ca..... .t..t.... a.....t... 660

CONSENSUS: actggragaa acccaaaacaa rgatcctcta aagcttggtg acacytttga gagcatmgcs 720
CEF94-B:a....g.....t....C..g 720
D6948-B:g....a.....C.....a..c 720

CONSENSUS: cagctacttg acatcacwyt accggtaggc ccacccggtg aggatgacaa gccctgggtr 780
CEF94-B:ac.ac.g 780
D6948-B:tt.a 780

CONSENSUS: ccactcaciaa grgtgccgtc amggatgttg gtwtgcagg gmgacgtaga tggsgamttt 840
CEF94-B:a..... .C..... .a..... .a..... .C..C... 840
D6948-B:g..... .a..... .t..... .C..... .g..a... 840

CONSENSUS: gaggttgarg aytaccttcc caaaatcaac ctcaagtcat caagtgagact rccmtatgtw 900
CEF94-B:a. .t.....a..a.....a 900
D6948-B:g. .C.....g..C.....t 900

CONSENSUS: ggtcgcacca aaggagarac wattggsgag atgatagcya tmtcraacca gtttctymga 960
CEF94-B:g.. a.....C...t. .C..a....Ca.. 960
D6948-B:a.. t.....g...C. .a..g.....tc.. 960

FIG. 3C

CONSENSUS: gagctatcar crctgytgaa gcarggtgca gggacaaarg ggtracaa gaagaagctr 1020
CEF94-B:a a...t... ..a.....g.....g.....a.....a 1020
D6948-B:g .g...C... ..g.....a.....g.....g.....g 1020

CONSENSUS: ctacagcatgy taagtgacta ytggtactta tcatgygggc tttgtttcc maaggctgar 1080
CEF94-B:tt.....C.....C.....a.....a.....a 1080
D6948-B:CC.....t.....C.....C.....C.....g 1080

CONSENSUS: aggtacgaca aaagyacatg gctcaccaag acccgkaaca tatggtcagc tccatcmcca 1140
CEF94-B:t.....t.....g.....g.....C.....C..... 1140
D6948-B:C.....C.....t.....t.....a.....a..... 1140

CONSENSUS: acacacctca tgatctcwat gatmacctgg cccgtgatgt ccaayagccc aaayaacgtg 1200
CEF94-B:t.....t.....C.....C.....C.....t..... 1200
D6948-B:a.....a.....a.....t.....t.....C..... 1200

CONSENSUS: ttgaacattg argggtgtcc rtcactctac aarttcaacc cgtyagagg wgggytraac 1260
CEF94-B:a.....a.....a.....a.....C.....a...t.g... 1260
D6948-B:g.....g.....g.....t.....t.....t...c.a... 1260

CONSENSUS: aggtatcgtsg agtggatawt ggcycggaw gaaccaagg cyytwgtata tgckgacaac 1320
CEF94-B:C.....t.....t.....C.....a.....t.....g..... 1320
D6948-B:g.....a.....t.....t.....t.....a.....t..... 1320

CONSENSUS: atatacatgtg tycactcmaa cacgtggtac tcaattgacc tagagaaggg tgaggcaaac 1380
CEF94-B:C.....a.....C.....a.....C.....C.....C..... 1380
D6948-B:t.....C.....C.....C.....C.....C.....C..... 1380

CONSENSUS: tgcackcgyc aacacatgca rgccgcmatg tactacatmc tyaccagagg rtggtcmgay 1440
CEF94-B:t..C.a.....a.....a.....a.....C.....g.....a..c 1440
D6948-B:g..t.g.....C... ..C.....C.....a.....C..t 1440

CONSENSUS: aacggygacc cmatgttcaa tcaracatgg gccacctttg csatgaacat tgccccwgct 1500
CEF94-B:C.....a.....a.....a.....C.....C.....t... 1500
D6948-B:t.....C.....C.....g.....g.....g.....a... 1500

FIG. 3D

CONSENSUS: ctagtktgtg actcatcrtg yctgatwatg aacctkcara tyaagacmta tgggtcaaggc 1560
CEF94-B:g.....g... C.....a...g..a.. .t.....C.. 1560
D6948-B:t....a.. t.....t...t.g.. .C.....a.. 1560

CONSENSUS: agygggaatg cagccacstt catcaacaac cayctyytka gcacsctwtg gctwgaccag 1620
CEF94-B: ..C..... ..g... ..C..... ..C.ct.g.g..a.. ...t..... 1620
D6948-B: ..t..... ..C..... ..t..... ..t.tc.t.C.t.. ...a..... 1620

CONSENSUS: tggaacytga tgarrcarcc yagwccagac agcgargagt tcaartcaat tgargacaag 1680
CEF94-B:C... ..ga..g.. C..a..... ..g... ..a..... ..g..... 1680
D6948-B:t... ..ag..a.. t..t..... ..a..... ..g..... ..a..... 1680

CONSENSUS: ctrggyatca acttyaagat tgagaggtcc attgatgaya tyaggggcaa gctsagacag 1740
CEF94-B: ..a..t.... ..t.... ..t..... ..t..... ..C..... ..g..... 1740
D6948-B: ..g..C.... ..C..... ..t..... ..C..... ..t..... ..C..... 1740

CONSENSUS: cttgtccycc ttgcacaacc aggttacctg agtggrrggg tygaaccaga rcaayccagc 1800
CEF94-B:t..t.....g.... ..t..... ..a...t..... 1800
D6948-B:C..t.....a..... ..C..... ..g...C..... 1800

CONSENSUS: ccaactgtwg agctkgacct actmggrtgg tcwgcwacwt acagcaaaga tctygggac 1860
CEF94-B:t.t.... ..a..g... ..a..t..a.t..... ..C..... 1860
D6948-B:a.g.... ..C..a... ..t..a..t.t..... ..t..... 1860

CONSENSUS: tatgtgccgg tgcttgacaa ggaacgcyta ttttgytctg ctgcgtatcc caarggrgta 1920
CEF94-B:t....t..... ..C..... ..t.... ..t..... ..g..a... 1920
D6948-B:t....t..... ..C..... ..t....t..... ..a..g... 1920

CONSENSUS: gagaayaara gycctaartc caargtyggg atcgagcarg catacaargt wgtcagggtay 1980
CEF94-B:C..g. .t....g.. ..a..C...g.t..... ..a.....t 1980
D6948-B:t..a. .C.....a.. ..g..t...a.t..... ..c 1980

CONSENSUS: gaggcgttga gggttggtagg tggttggaac taccactcc tgaacaaagc ytgcaagaay 2040
CEF94-B:t....t.....t.....t..... ..C..... ..t 2040
D6948-B:t....t.....t.....t..... ..t..... ..c 2040

FIG. 3E

CONSENSUS: aaygcargy cmgctcggcg gcattctggag gccaaggggt tccrcctcga ygagttcctm 2100
CEF94-B: ..C...g.C. .C..... .a..... C.....a 2100
D6948-B: ..t...a.t. .a..... .g..... t.....c 2100

CONSENSUS: gccgagtgtt cwgagygtgc mgagttcggw gargcyttcg aaggttcaa yatcaagctg 2160
CEF94-B:t...C... a.....t .g.C... t..... 2160
D6948-B:a...t... C.....a .a.t... C..... 2160

CONSENSUS: acmgtaacay ckgagagcct mgccgaactk aacarccag tacccccac rccyccaaat 2220
CEF94-B: ..C.....t .t..... a.....gg.C..... 2220
D6948-B: ..a.....C .g..... C.....tga..... a.t..... 2220

CONSENSUS: gtcaacagac cagtcaacac yggkggrctm aaggcagtc gaaaygcct caagaccggy 2280
CEF94-B:t..... .t.g..a..CC..... .t..... 2280
D6948-B:t..... C..t..g..at..... .t.....c 2280

CONSENSUS: cgggtayagra aygaagccgg actragtgyy ctctctctyc tagccacmc mngmagccgw 2340
CEF94-B:C..g. .C..... .g.....tt.....a.. aa.a.....t 2340
D6948-B:t..a. .t..... .a.....CC... cc.C.....a 2340

CONSENSUS: ctrcargay cagtyaaggc caaggcagar gccgagaaac tccacaagtc yaagccmgay 2400
CEF94-B: ..g..a..t.t..... .a.....aC.....a..c 2400
D6948-B: ..a..g..C.C..... .g.....t.....C..t 2400

CONSENSUS: gaccccgatg cagactggtt ygaamgrtca gaaacyctgt cagacctkct ggagaaagcc 2460
CEF94-B:t..... .C...a..a... .t.....t... .t.....t... 2460
D6948-B:t..... .t.....C... .t.....g... 2460

CONSENSUS: gacatygccca gcaaggtcgc yactcagca ctctgtgaaa caagcgacgc ycttgaagcr 2520
CEF94-B:C... .t..... C..... .t.....C.....a 2520
D6948-B:t..... .t.....t.....t.....g 2520

CONSENSUS: gtycagtcra cytcmgtgta cacyccmaag taccagarg tyagaaccc acagaccgcc 2580
CEF94-B: ..t.....g. .t..C..... .t..C... .t.....a.. .C..... 2580
D6948-B: ..C.....a. .C..a..... .C..a... .t.....g. .t..... 2580

FIG. 3F

```

CONSENSUS: tccaaccccg ttgttgggct ccacctgccc gccaagagrg ccaccggtgt ccaggcmgt 2640
CEF94-B:      .....C... 2640
D6948-B:      .....a... 2640

CONSENSUS: cttctcggag caggracgag cagaccaatg gggatggagg cyccaacacg gtccaagaac 2700
CEF94-B:      .....a... 2700
D6948-B:      .....g... 2700

CONSENSUS: gccgtgaaaa tggccaaamg gcggcaacgc caaaargaga gccgccaaya gccatgatgg 2760
CEF94-B:      .....C... 2760
D6948-B:      .....a... 2760

CONSENSUS: gaaccactca agaaggagac actaayccca gaccccgatat ccccggcctt cgcctgcggg 2820
CEF94-B:      .....t... 2820
D6948-B:      .....C... 2820

CONSENSUS: ggccccc 2827
CEF94-B:      ..... 2827
D6948-B:      ..... 2827
```

CONSENSUS: MTNLQDQTQQ	IVPEIRSLLM	PTTGPASIPD	DTLEKHTLRS	ETSTYNLTVG	DTGSGLIVFF	60
CEF94-PP:	.....	.....	.....	.....	.....	60
D6948-PP:	.....	.....	.....	.....	.....	60
TY89-PP:	-----	-----	-----	-----	-----	
CONSENSUS: PGFPGSIVGA	HYTLQSNNGY	KFDQMLLTAQ	NLPASYNYCR	LVSRSLTVRS	STLPGGVYAL	120
CEF94-PP:	.....	.....	.....	.....	.....	120
D6948-PP:	.....	.....	.....	.....	.....	120
TY89-PP:	-----	-----	-----	-----	-----	
CONSENSUS: NGTINAVTFQ	GSLSELT DVS	YNGLMSATAN	INDKIGNVLV	GEGTVLSLP	TSYDLGVRL	180
CEF94-PP:	.....	.....	.....	.....	.....	180
D6948-PP:	.....	.....	.....	.....	.....	180
TY89-PP:	-----	-----	-----	-----	-----	
CONSENSUS: GDPIPAIGLD	PKMVATCDSS	DRPRVYTITA	ADDYQFSSQY	Q.GGVTTITLE	SANIDAITSL	240
CEF94-PP:	.....	.....	.....	..P.....	.....	240
D6948-PP:	.....	.....	.....	..A.....	.....	240
TY89-PP:	-----	-----	-----	-----	-----	
CONSENSUS: S.GGELVFQT	SV.GL.LGAT	IYLIGFDGTA	VITRAVAA.N	GLT.GTDNL.	PFN.VIPT.E	300
CEF94-PP:	..V.....	..H.V....	.....N.	..T....L	..L....N.	300
D6948-PP:	..I.....	..Q.I....	.....D.	..A....M	..I....S.	300
TY89-PP:	-----	-----	-----	-----	-----	
CONSENSUS: ITQPITSIKL	EIVTSKSGGQ	AGDQMSWSA.	GSLAVTIHGG	NYPGALRPVT	LVAYERVATG	360
CEF94-PP:	.....	.....R	.....	.....	.....	360
D6948-PP:	.....	.....S	.....	.....	.....	360
TY89-PP:	-----	-----	-----	-----	-----	
CONSENSUS: SVVTVAGVSN	FELIPNELA	KNLVTEYGRF	DPGAMNYTKL	ILSERDRLGI	KTVWPTREYT	420
CEF94-PP:	.....	.....	.....	.....	.....	420
D6948-PP:	.....	.....	.....	.....	.....	420
TY89-PP:	-----	-----	-----	-----	-----	

FIG. 4B

CONSENSUS:	DFREYFMEVA	DLNSPLKLAG	AFGEKDIIRA	.RRIAPVVS	TLFPPAAPLA	HAIGEGVDYL	480
CEF94-PP:	.....	.....	.....	I.....	.....	.....	480
D6948-PP:	.....	.....	.....	L.....	.....	.....	480
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	LGDEAQAASG	TARAASGAR	AASGRIRQLT	LAADKGYEVV	ANLFQVPQNP	VVDGILASPG	540
CEF94-PP:	.....	.....	.....	.....	.....	.....	540
D6948-PP:	.....	.....	.....	.....	.....	.....	540
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	.LRGAHNLDC	VLREGATLFP	VVITTVEDAM	TPKALNSKMF	AVIEGVREDL	QPPSQRSFI	600
CEF94-PP:	V.....	.....	.....	.....	.....	.....	600
D6948-PP:	I.....	.....	.....	.....	.....	.....	600
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	RTLSGHRVYG	YAPDGVLPLE	TGRDYTEVPI	DDVWDDSIML	SKDPIPIVG	NSGNLAIAYM	660
CEF94-PP:	.....	.....	.....	.....	.....	.....	660
D6948-PP:	.....	.....	.....	.....	.....	.....	660
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	DVFRPKVPIH	VAMTGALNA.	GEIE.VSFRS	TKLATAHRLG	LKLAGPGAED	VNTG.NWATF	720
CEF94-PP:	.....	.....C.....	.....K.....	.....	.....	.....P.....	720
D6948-PP:	.....	.....Y.....	.....N.....	.....	.....	.....S.....	720
TY89-PP:	-----	-----	-----	-----	-----	-----	
CONSENSUS:	IKRFPNPRD	WDRLPYINLP	YLPNAGROQ	HLAMAASEFK	ETPELESVR	AMEAAANVDP	780
CEF94-PP:	.....	.....	.....	.....	.....	.....	780
D6948-PP:	.....	.....	.....	D.....	.....	.....	780
TY89-PP:	--.....	.....	.....T.....	.....F.....	.....D.....	.....D.....	58
CONSENSUS:	LFQSALSVFM	WLENGIVTD	MANFALSDPN	AHRMRNFLAN	APQAGSKSOR	AKYGTAGYGV	840
CEF94-PP:	.....	.....	.....	.....	.....	.....	840
D6948-PP:	.....	.....	.....	.....	.....	.....	840
TY89-PP:	..R...Q...	.....	.....	.....K.....	.....	.....	118

FIG. 4C

CONSENSUS: EARGTPPEA QREKDRISK KMETMGIYFA TPEWVALNGH RGPSPGOLKY WQNTREIPDP	900
CEF94-PP:	900
D6948-PP:	900
TY89-PP:	178
CONSENSUS: NEDYLDYVHA EKSRLASEEQ ILRAATSIYG APQQAEPPOA FIDEVAKVYE INHGRGPNQE	960
CEF94-PP:	960
D6948-PP:	960
TY89-PP:	238
CONSENSUS: QMKDLLLTAM EMKHRNPRA PPKPKPKPNA PTQPPGRLG RWIRTVSEDE LE	1012
CEF94-PP:	1012
D6948-PP:	1012
TY89-PP:	290

FIG. 5A

CONSENSUS: MSD.FNSPOA RS.ISAAGI KPTAGQDVEE LLIPKVVWPP EDPLASPSRL AKFLRENGYK	60
CEF94-VP1: ...I.....T.....	60
D6948-VP1: ...V.....K.....	60
CONSENSUS: .LQPRSLPEN EEYETDQILP DLAWMRQIEG AVLKPTLSLP IGDQEYFPKY YPTHRPSKEK	120
CEF94-VP1: V.....	120
D6948-VP1: I.....	120
CONSENSUS: PNAYPPDIAL LKQMIYLFLO VPEA...LKD EVTLITQNI R DKAYGSGTYM GOATRLVAMK	180
CEF94-VP1: .....NEG...	180
D6948-VP1: .....TDN.....	180
CONSENSUS: EVATGRNPKNK DPLKLGTYEE SIAQLLDITL PVGPPGEDDK PWVPLTRVPS RMLVLTGDVD	240
CEF94-VP1:	240
D6948-VP1:	240
CONSENSUS: G.FEVEDYLP KINLKSSSGL PYVGRTKGET IGEMIAISNQ FLRELS.LLK QGAGTKGSNK	300
CEF94-VP1: .D.....T.....	300
D6948-VP1: .E.....A.....	300
CONSENSUS: KKLLSMLSDY WYLSGGLLFP KAERYDKSTW LTKTRNIWSA PSPTHLMISM ITWPVMSNSP	360
CEF94-VP1:	360
D6948-VP1:	360
CONSENSUS: NNVLNIEGCP SLYKENPFRG GLNRIVEWI. AP.EPKALVY ADNIYIVHSN TWYSIDLEKG	420
CEF94-VP1: .....L..E.....	420
D6948-VP1: .....M..D.....	420
CONSENSUS: EANCTROHMQ AAMYIYLTRG WSDNGDPMFN QTWATFAMNI APALVVDSSC LIMNLQIKTY	480
CEF94-VP1:	480
D6948-VP1:	480
CONSENSUS: QGSGNAATF INNHLSTLV LDQWNL.M.QP .PDSEEFKSI EDKLGINFKI ERSIDDIRGK	540
CEF94-VP1: .....R...R...	540
D6948-VP1: .....K...S...	540

FIG. 6

CONSENSUS:	MVSRDQTNDR	SDD.PARSNP	TDCSVHTEPS	DANNRTGVHS	GRHP.EAHSQ	VRDLDLQFDC	60
D6948-VP5:	.....	E.....	.....	.....	R.....	.....	60
CEF94-VP5:	.....	K.....	.....	.....	G.....	.....	60
CONSENSUS:	GHRVRANCL	FPW.PWLNCG	CSLHTAEQWE	LQVRSDAPDC	PEPTGQLQLL	QASESESHSE	120
D6948-VP5:	.....	F.....	.....	.....	.....	.....	120
CEF94-VP5:	.....	I.....	.....	.....	.....	.....	120
CONSENSUS:	VKHT.WWRLC	TK.HHKRRDL	PRKPE				145
D6948-VP5:	....P.....	..W.....	.....				145
CEF94-VP5:	....S.....	..R.....	.....				145

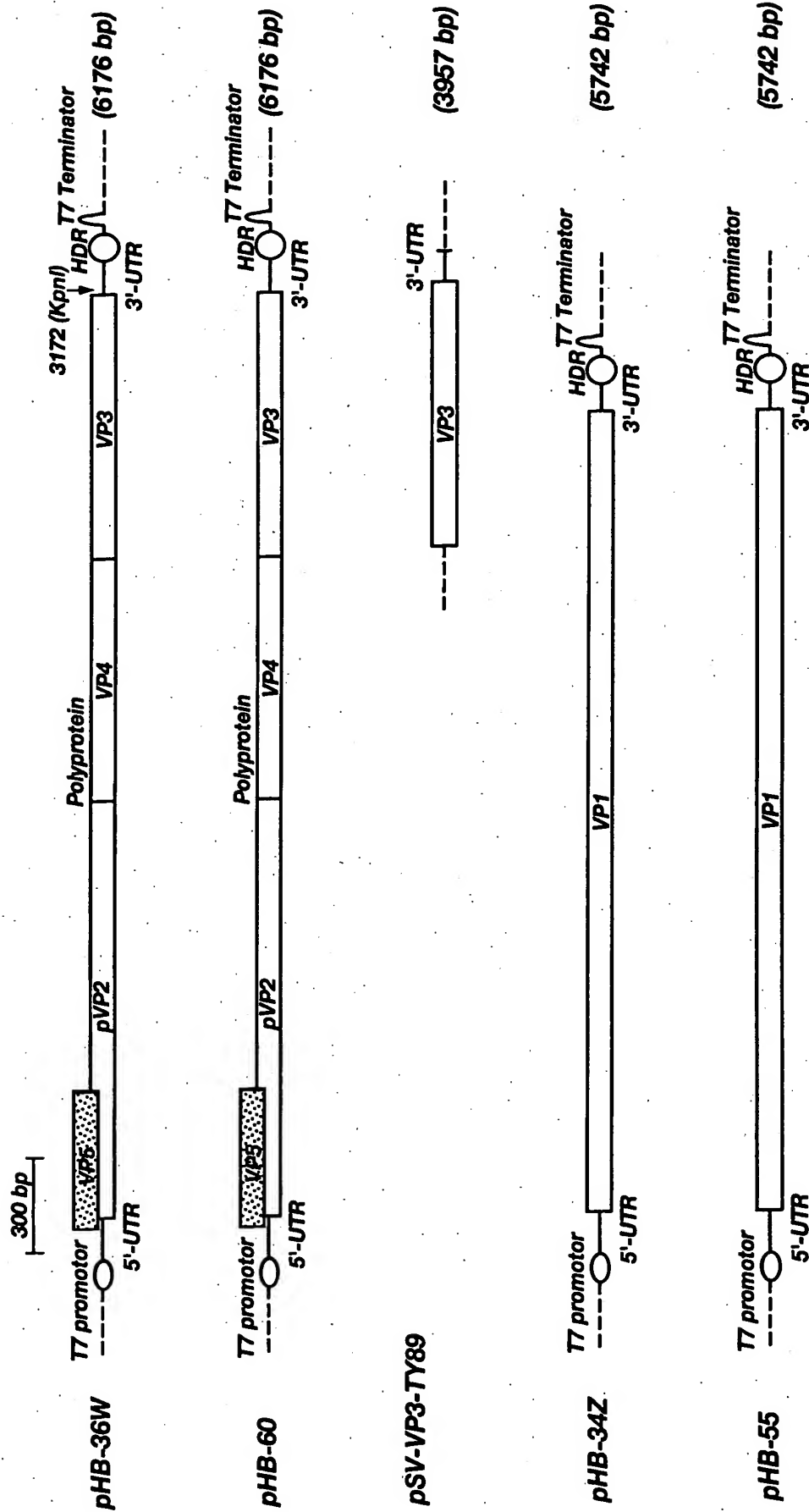


FIG. 7

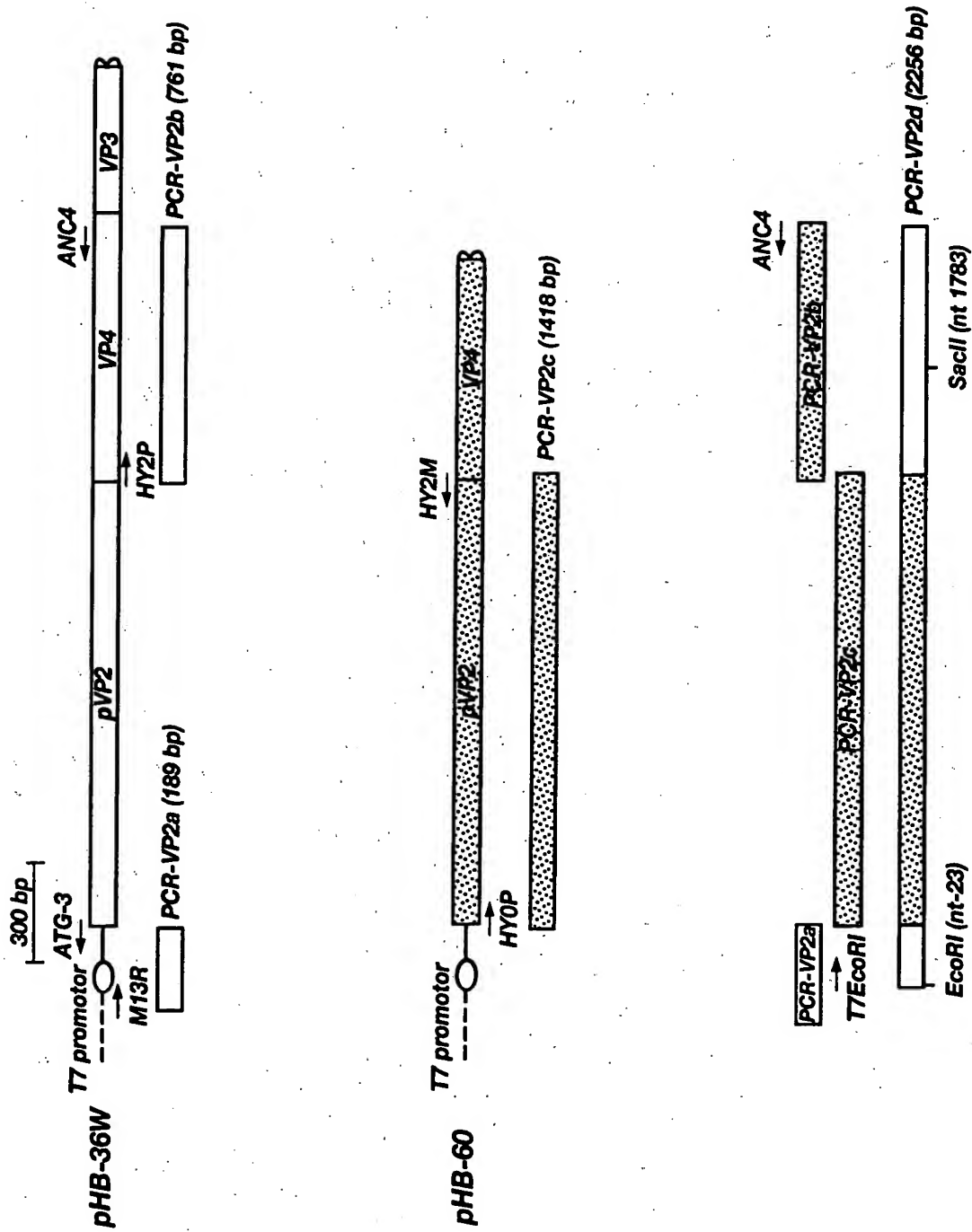


FIG. 8A

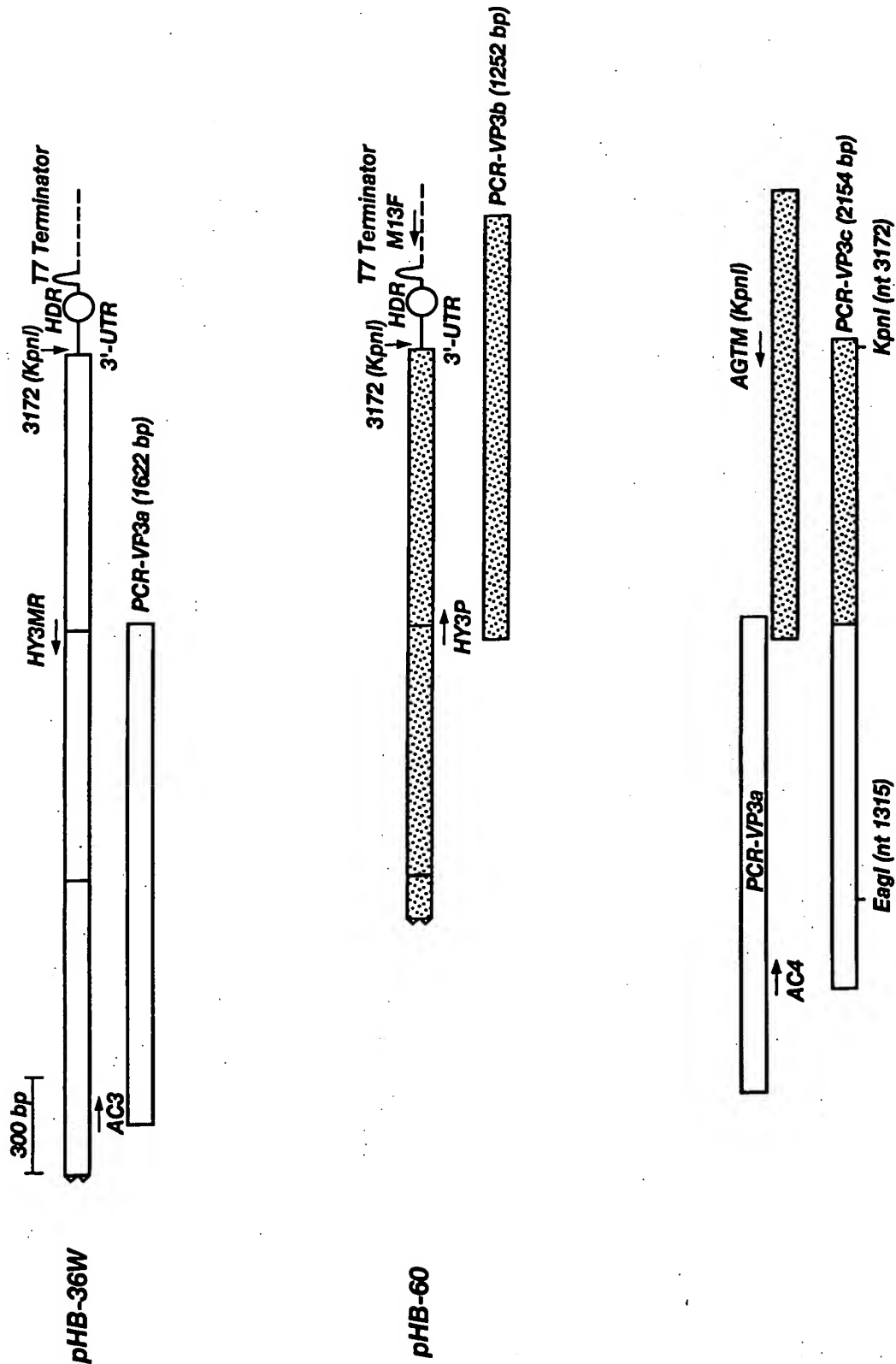


FIG. 8B

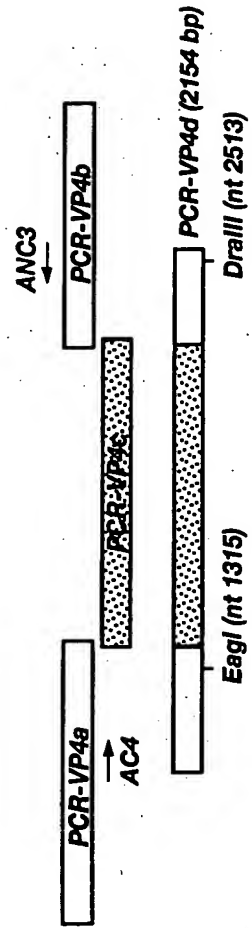
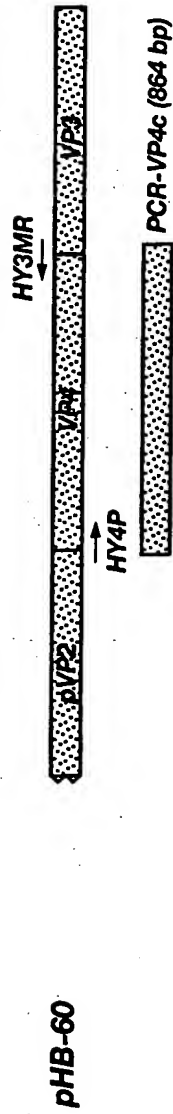
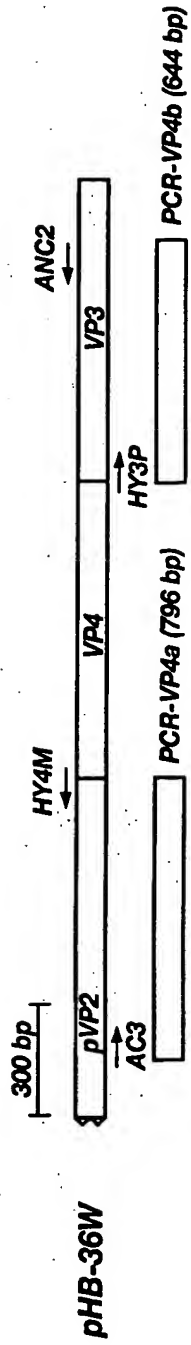
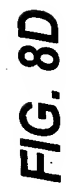


FIG. 8C



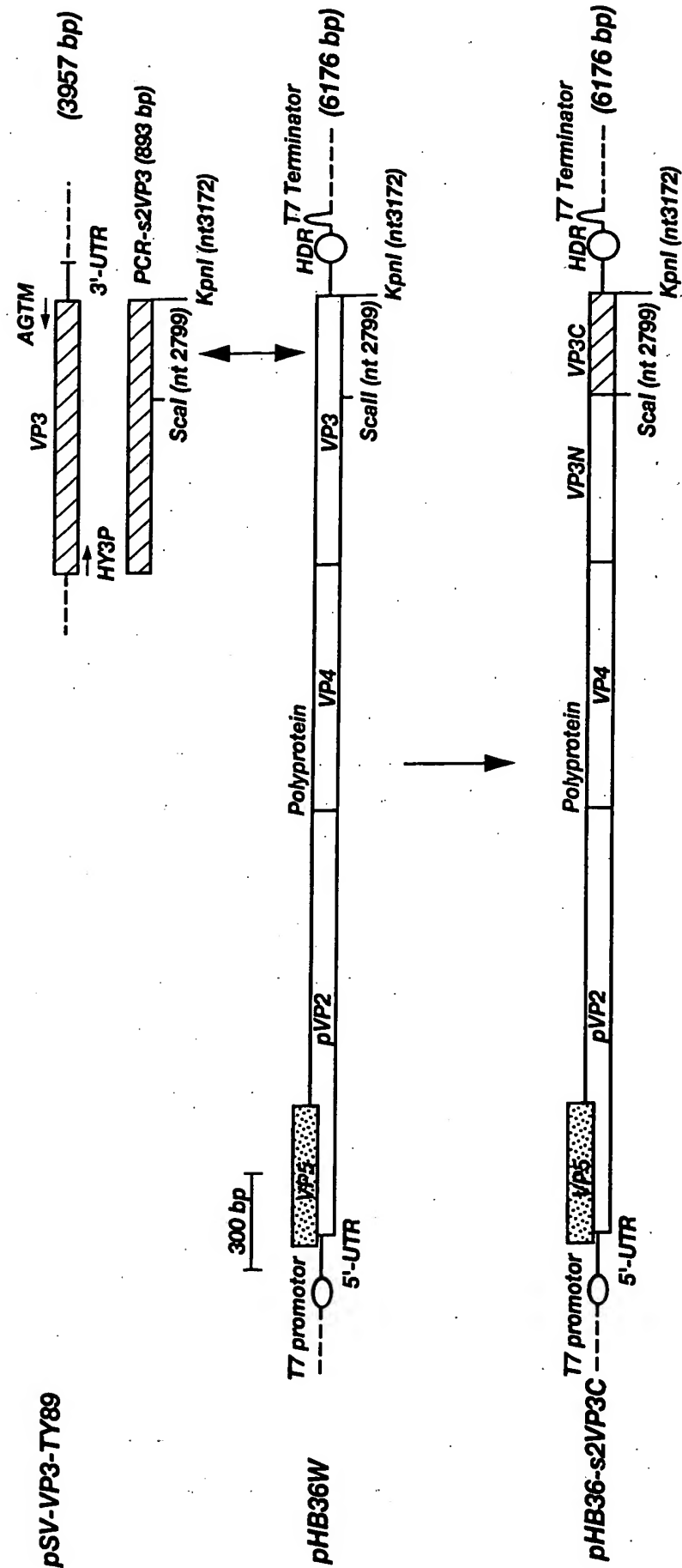


FIG. 8E

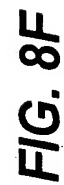


FIG. 8F

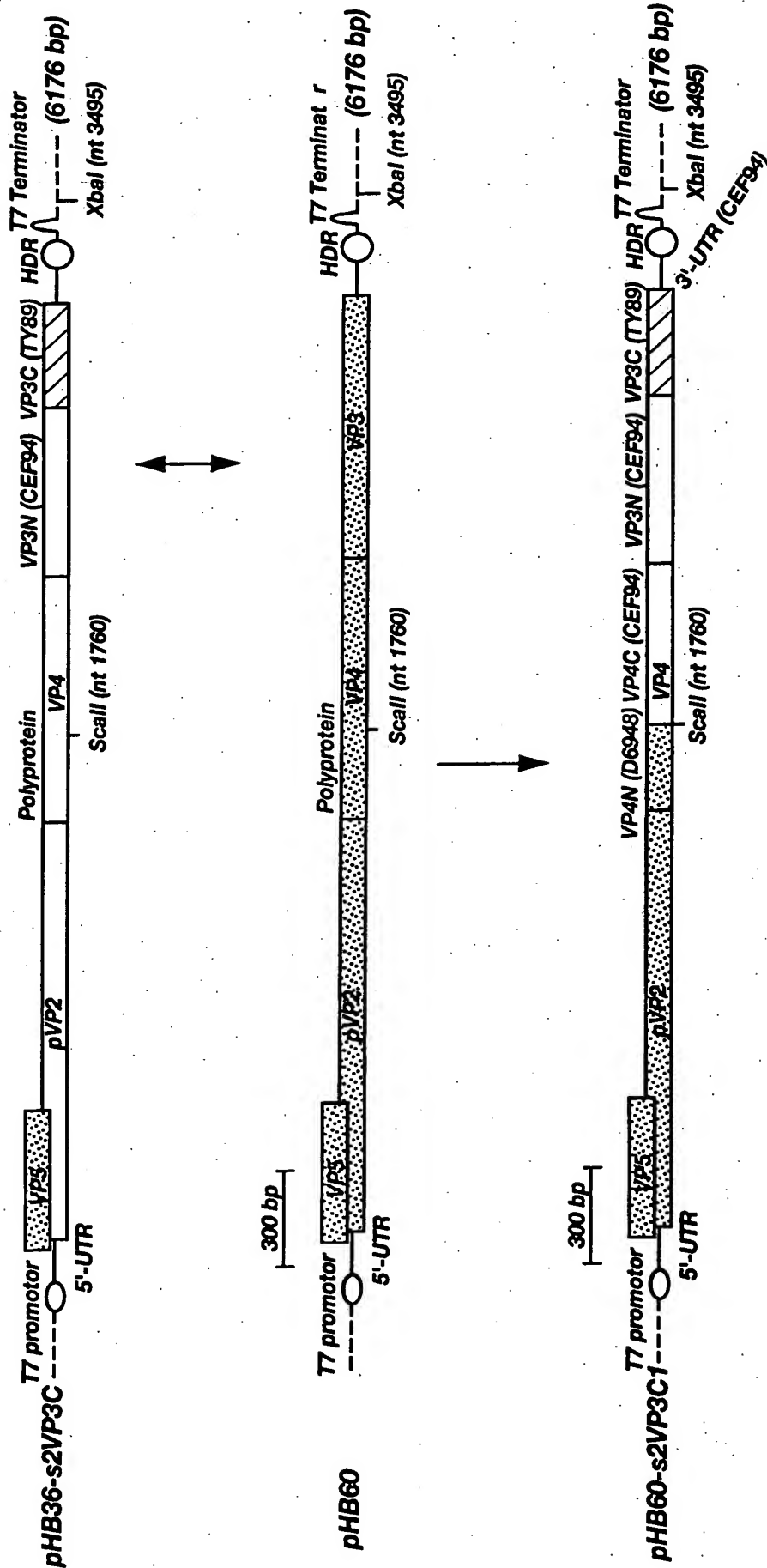


FIG. 8G

VP4 ← → VP3
 ↙ Sac II
 CEF94-PP: 724-FPHNPRD WDRLPYLNLP YLPPNAGRQY HLA MAASEFK ETPELES AVR AMEAAANVDP 780
 TY89-PP: 724-..... T..... F..... L..... D..... D..... 780
 CEF94-PP: LFQSALSVFM WLEENGIVTD MANFALSDPN AHRMRNFLAN APOAGSKSOR AKYGTAGYGV 840
 TY89-PP: ..R...Q... ..K... .. 840
 ↙ Sac I
 CEF94-PP: EARGPTPEEA QREKDRISK KMETMGIYFA TPEWVALNGH RGSPGOLKY WONTREIPDP 900
 TY89-PP: 900
 CEF94-PP: NEDYLDYVHA EKSRLASEEQ ILRAATSIYG APQAEPPQA FIDEVAKVE INHGRGPNOE 960
 TY89-PP:P..... V..... R..... 960
 CEF94-PP: QMKDLLLTAM EMKHRNPRRA LPKPKPKPNA PTQRP PGR LG RWIRTVSDED LE 1012
 TY89-PP: P..... S..... 1012

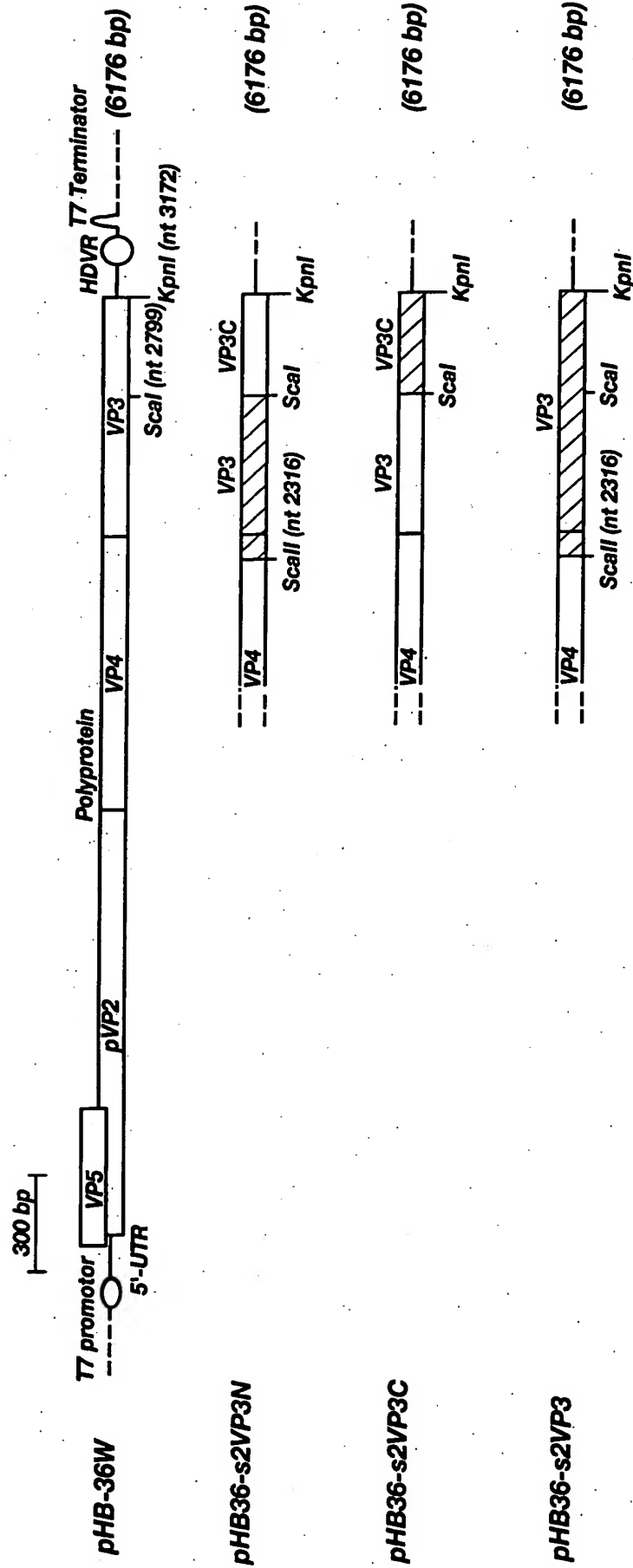
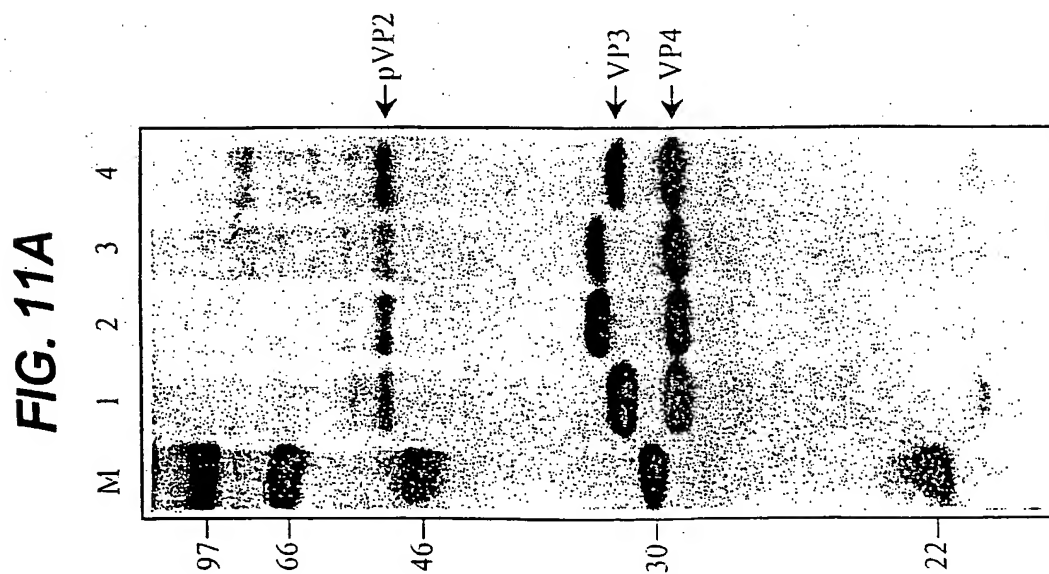
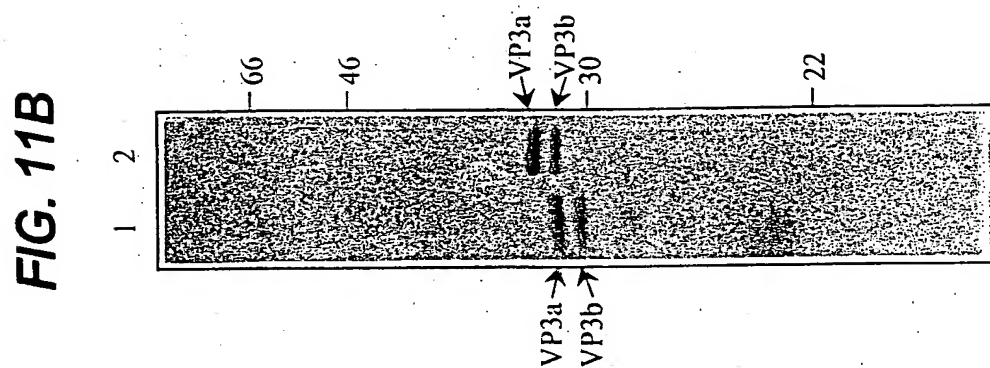
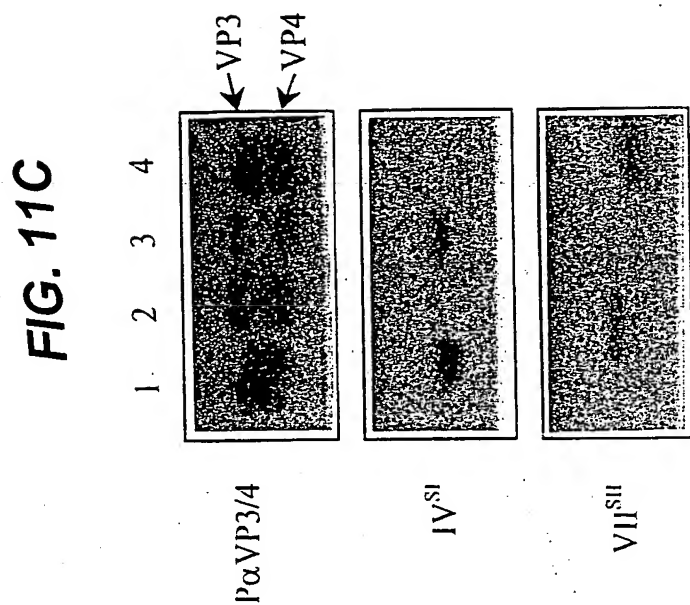


FIG. 10



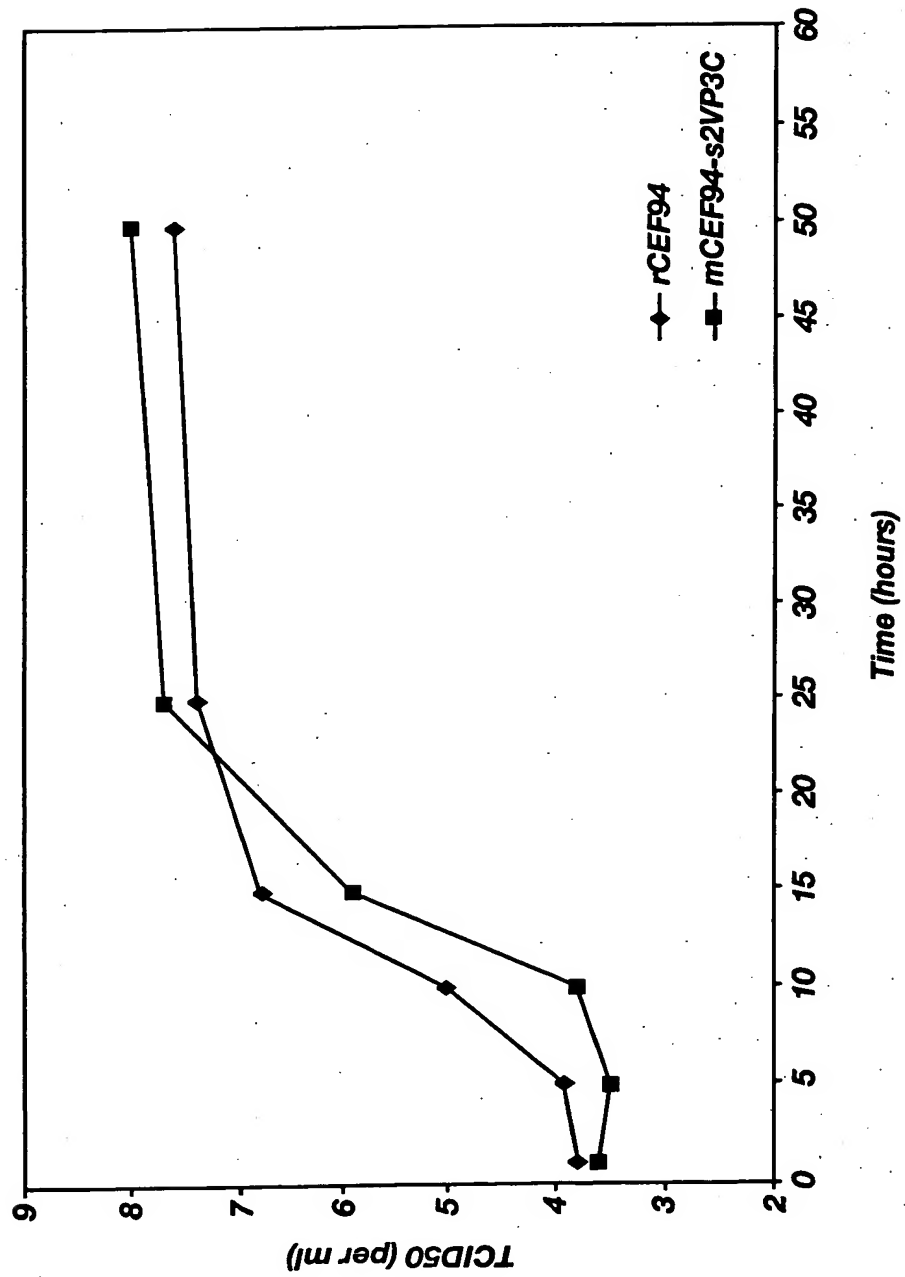
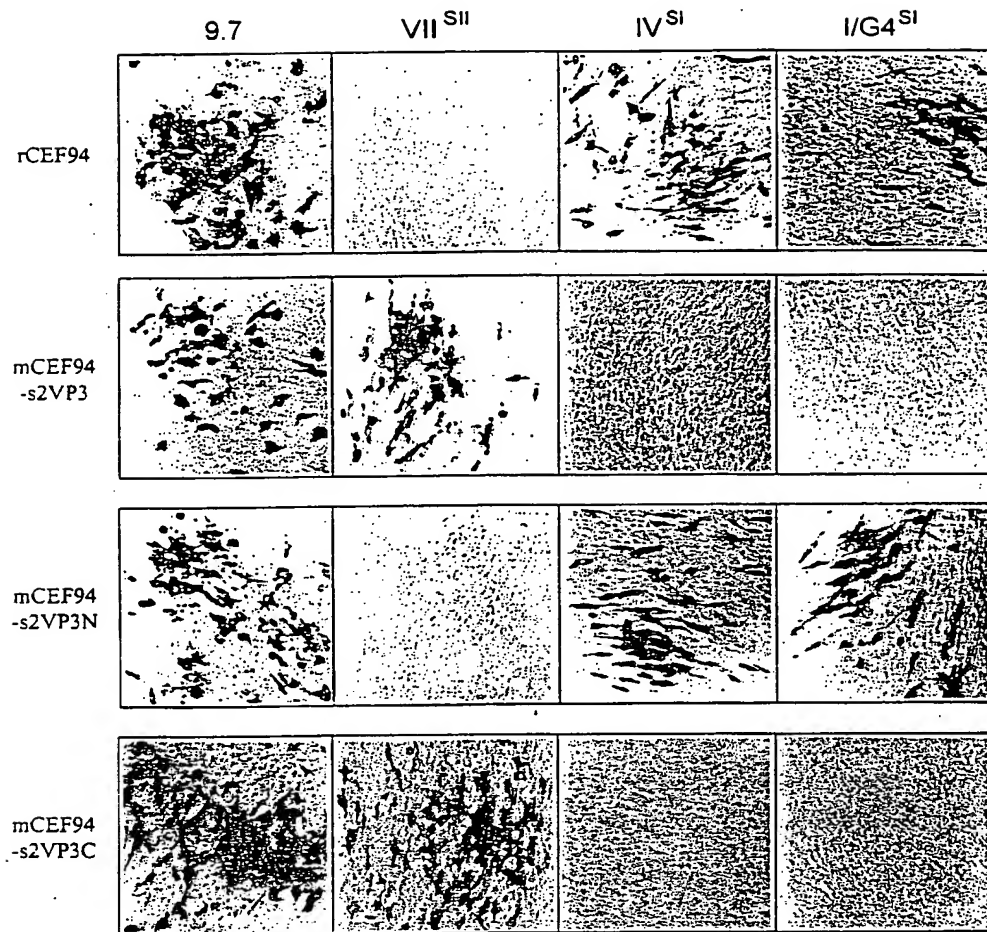


FIG. 12

FIG. 13



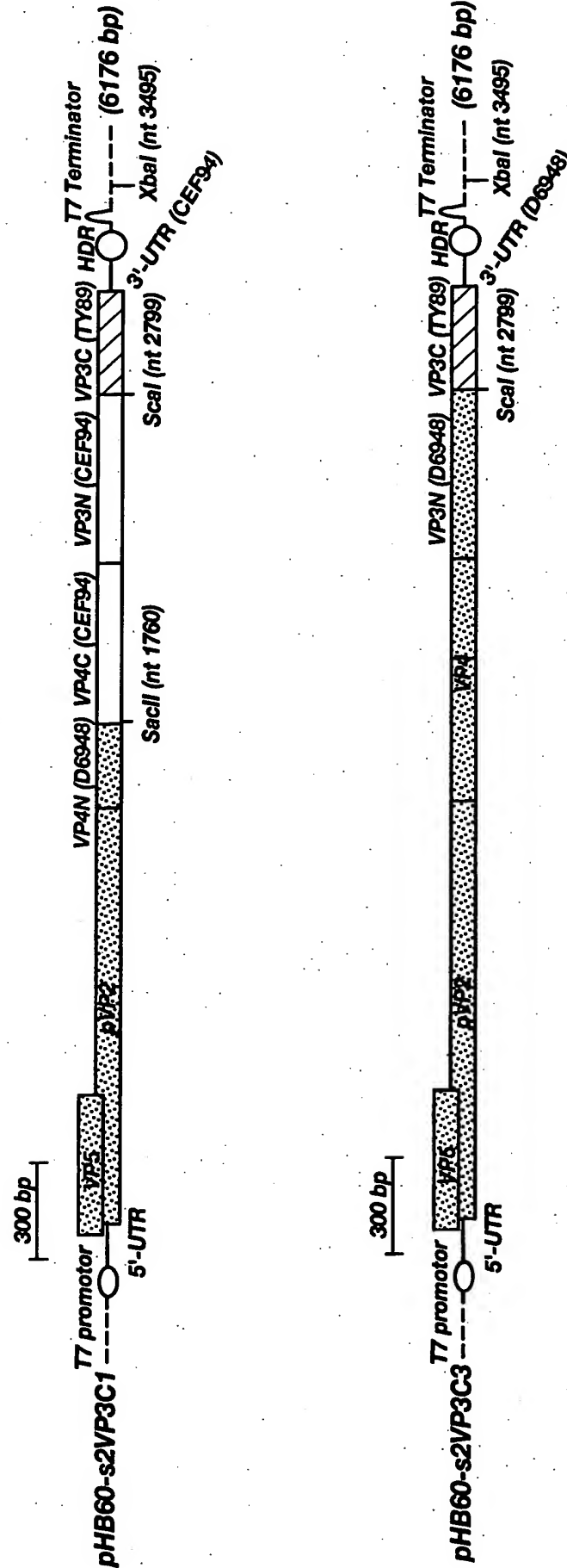
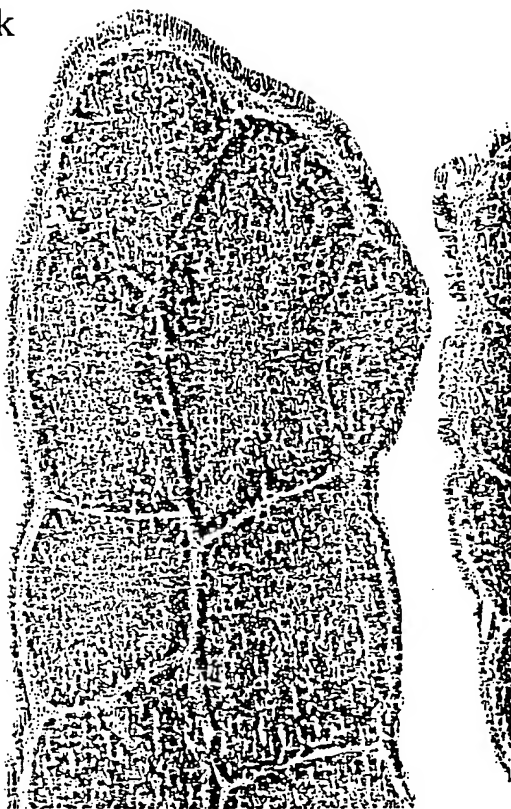


FIG. 14

FIG. 17

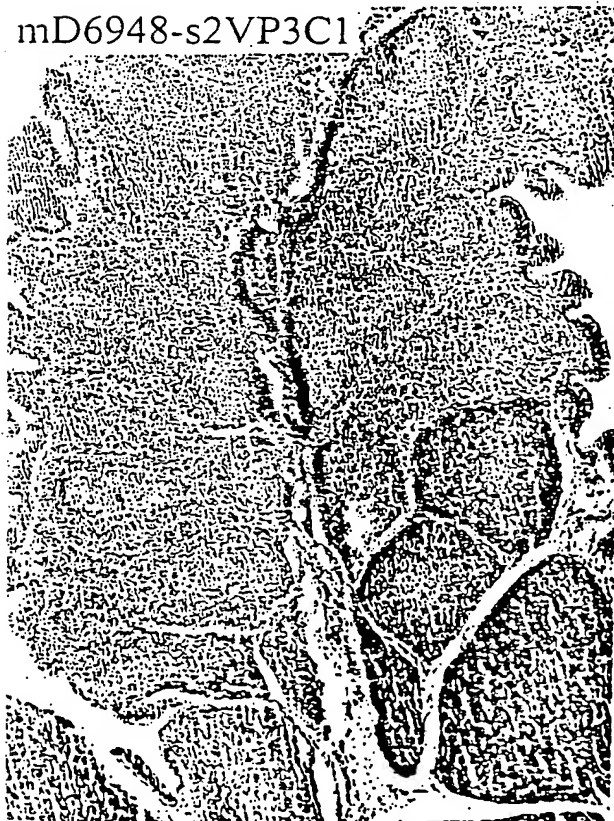
Mock



D6948



mD6948-s2VP3C1



mD6948-s2VP3C3



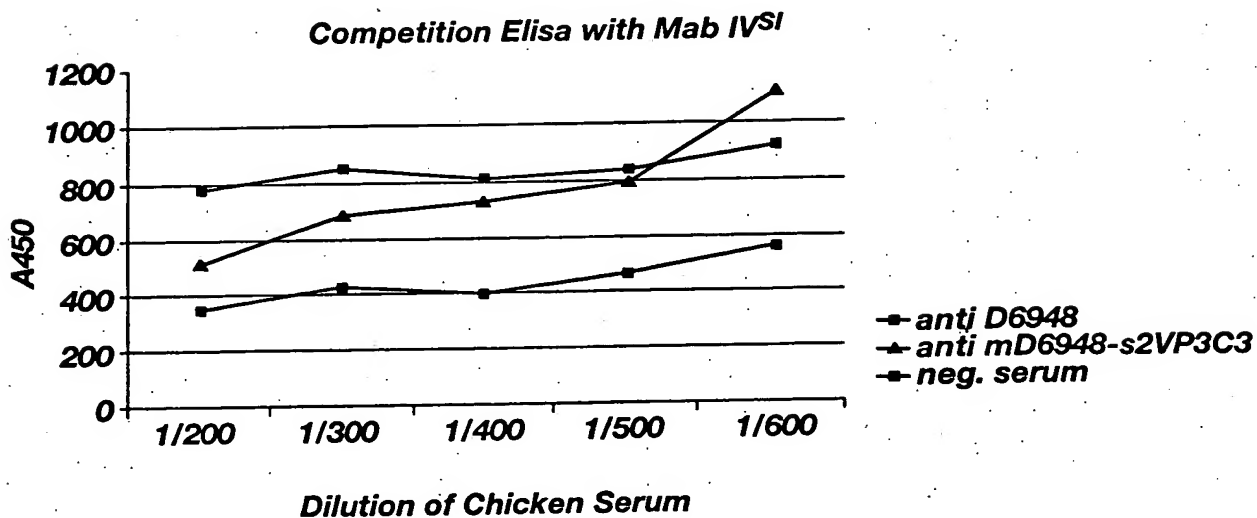
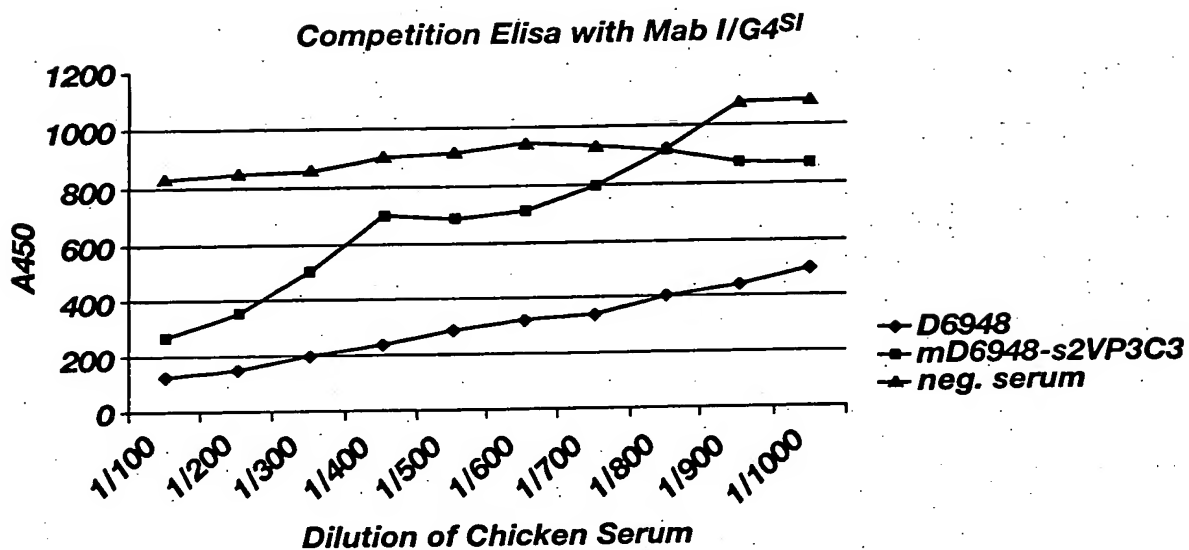


FIG. 18

FIG. 19

D6948-VP5: MLSLMVSRDQ TNDRSDEPA RSNPTDCSVH TEPDANNRT GVHSGRHPRE AHSQVRDLDL 60
CEF94-VP5: ----K..G. 56

D6948-VP5: QFDCGGHRVR ANCLFPWFPW LNCGCSLHTA EQWELQVRSD APDCPEPTGQ LQLQASESE 120
CEF94-VP5:I.. 116

D6948-VP5: SHSEVKHTPW WRLCTKWHHK RRDLPKPE 149
CEF94-VP5:S.R... 145

D6948-PP:	MTNLQDQTOQ	IVPFIRSLIM	PTTGPASIPD	DTLEKHTLRS	ETSTYNLTVG	DTGSLIVFF	60
CEF94-PP:							60
D6948-PP:	PGFPGSIVGA	HYTLQSNGY	KFDQMLLTAQ	NLPASYNCR	LVSRSLTVRS	STLPGGVYAL	120
CEF94-PP:							120
D6948-PP:	NGTINAVTFQ	GSLSELTQVS	YNGLMSATAN	INDKIGNVLV	GEGVTVLSLP	TSYDLGYVRL	180
CEF94-PP:							180
D6948-PP:	GDPIPAIGLD	PKMVATCDSS	DRPRVYTITA	ADDYQFSSQY	QAGGVITITLF	SANIDAITSL	240
CEF94-PP:					P.		240
D6948-PP:	SIGGELVFQT	SVQGLILGAT	IYLIGFDGTA	VITRAVAADN	GLTAGTDNLM	PFNIVIPTSE	300
CEF94-PP:	V.	H. V.		N.	T.	L.	N.
D6948-PP:	ITQPITSIKL	EIVTSKSGGQ	AGDQMSWSAS	GSLAVTIHGG	NYPGALRPVT	LVAYERVATG	360
CEF94-PP:				R.			360
D6948-PP:	SVVTVAGVSN	FELIPNELA	KNLVTEYGRF	DPGAMNYTKL	ILSERDRLGI	KTVWPTREYT	420
CEF94-PP:							420
D6948-PP:	DFREYFMEVA	DLNSPLKIAG	AFGEKDIIRA	LRRIAPVVVS	TLFPPAAPLA	HAIGEGVDYL	480
CEF94-PP:				I.			480
D6948-PP:	LGDEAQAASG	TARAASGKAR	AASGRIROLT	LAADKGYEVV	ANLFQVPQNP	VVDGILASPG	540
CEF94-PP:							540
D6948-PP:	ILRGAHNDC	VLREGATLFP	VVITTTVEDAM	TPKALNSKMF	AVIEGVREDL	QPPSQRGSFI	600
CEF94-PP:	V.						600
D6948-PP:	RTLSGHRVYG	YAPDGVLPLE	TGRDYTVVPI	DDVWDDSIML	SKDPIPIVG	NSGNLAIAYM	660
CEF94-PP:							660
D6948-PP:	DVFRPKVPIH	VAMTGALNAY	GEIENVSFERS	TKLATAHRLG	LKLAGPGAFD	VNTGSNWATE	720
CEF94-PP:							720

FIG. 20B

D6948-PP:	IKRFPNPRD	WDRLPYLNP	YLPPNAGROY	DLAMAASEFK	ETPELESVR	AMEAAANVDP	780
CEF94-PP:	.....	.....	.....	H.....	.....	.....	780
D6948-PP:	LFQSALSVFM	WLEENGIVTD	MANFALSDPN	AHRMRNFLAN	APQAGSKSOR	AKYGTAGYGV	840
CEF94-PP:	.....	.....	.....	.....	.....	.....	840
D6948-PP:	EARGPTPEEA	QREKDTRISK	KMETMGIYFA	TPEWVALNGH	RGPSGOLKY	WONTREIPDP	900
CEF94-PP:	.....	.....	.....	.....	.....	.....	900
D6948-PP:	NEDYLDYVHA	EKSRLASEEQ	ILRAATSIYG	APGQAEPPQA	FIDEVAKVYE	INHGRGPNQE	960
CEF94-PP:	.....	.....	.....	.....	.....	.....	960
D6948-PP:	QMKDLLLTAM	EMKHRNPRRA	PPKPKPKPNA	PTQRPFGRLG	RWIRAVSDED	LE	1012
CEF94-PP:	.....	.....	L.....	.....	.....T.....	.....	1012

FIG. 21A

D6948-VP1:	MSDVFNPOA	RSKISAAFGI	KPTAGQDVEE	LLIPKVVVPP	EDPLASPSRL	AKFLRENGYK	60
CEF94-VP1:	I.....	T.....	.....	.....	.....	.....	60
D6948-VP1:	ILQPRSLPEN	EEYETDQILP	DLAWMRQIEG	AVLKPTLSLP	IGDQYFFPKY	YPTHRPSKEK	120
CEF94-VP1:	V.....	.....	.....	.....	.....	.....	120
D6948-VP1:	PNAYPPDIAL	LKQMIYLFLO	VPEATDNLKD	EVTLLTONIR	DKAYGSGTYM	GQATRLVAMK	180
CEF94-VP1:	.....	.....	NEG...	.....	.....	.....	180
D6948-VP1:	EVATGRNPNK	DPLKLGTYFE	SIAQLLDITL	PVGPPGEDDK	PWVPLTRVPS	RMLVLTGDVD	240
CEF94-VP1:	.....	.....	.....	.....	.....	.....	240
D6948-VP1:	GEFEVEDYLP	KINKSSSGL	PYVGRTKGET	IGEMIAISNQ	FLRELSALK	QGAGTKGSNK	300
CEF94-VP1:	D.....	.....	.....	.....	T.....	.....	300
D6948-VP1:	KKLLSMLSDY	WYLSGGLLFP	KAERYDKSTW	LTKTRNIWSA	PSPTHLMISM	ITWPVMSNSP	360
CEF94-VP1:	.....	.....	.....	.....	.....	.....	360
D6948-VP1:	NNVLNIEGCP	SLYKENPFRG	GLNRIVEWIM	APDEPKALVY	ADNIYIVHSN	TWYSIDLEKG	420
CEF94-VP1:	.....	.....	.....	L..E.....	.....	.....	420
D6948-VP1:	EANCTRQHMQ	AAMYIILTRG	WSDNGDPMFN	QTWATEFAMNI	APALVVDSSC	LIMNLQIKTY	480
CEF94-VP1:	.....	.....	.....	.....	.....	.....	480
D6948-VP1:	GQSGNAATF	INNHLISTLV	LDQWNLMKQP	SPDSEEFKSI	EDKLGINFKI	ERSIDDIRGK	540
CEF94-VP1:	.....	.....	.....	R..R.....	.....	.....	540
D6948-VP1:	LRQLVPLAQP	GYLSGGVEPE	QPSPTVELDL	LGWSATYSKD	LGIYVPVLDK	ERLFCSAAYP	600
CEF94-VP1:	.....	L....	.....	S.....	.....	.....	600
D6948-VP1:	KGVENKSLKS	KVGIEQAYKV	VRYEALRLVG	GWNYPLLNKA	CKNNASAARR	HLEAKGFPLD	660
CEF94-VP1:	.....	.....	.....	.....	G....	.....	660
D6948-VP1:	EFLAEWSELS	EFGEAFEGFN	IKLTVTPESL	AELNRPVPPK	PPNVNRPVNT	GGLKAVSNAL	720
CEF94-VP1:	.....	.....	.....	S...K.....	.....	.....	720

FIG. 21B

D6948-VP1: KTGRYNEAG LSGLVLLATA RSRLQDAVKA KAEAEKHLKS KPDDPDADWF ERSETLSDLL 780
CEF94-VP1: 780

D6948-VP1: EKADIASKVA HSALVETSDA LEAVQSTSVY TPKYPEVKNP QTASNPVVGL HLPKRATGV 840
CEF94-VP1: 840

D6948-VP1: QAALLGAGTS RPMGMEAPTR SKNAVKMAKR RQRQKESRQ- - 879
CEF94-VP1:Q P 881

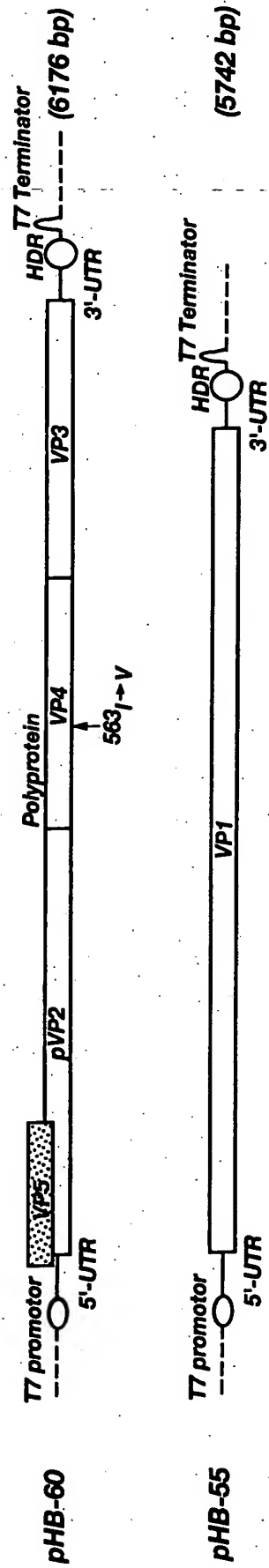


FIG. 22

FIG. 23C

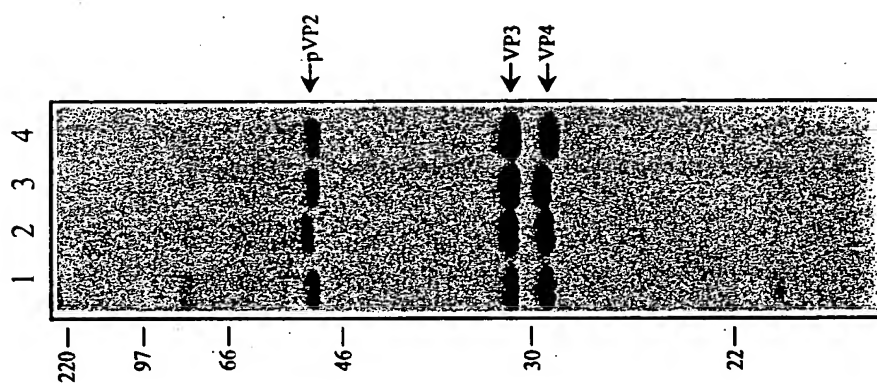


FIG. 23B

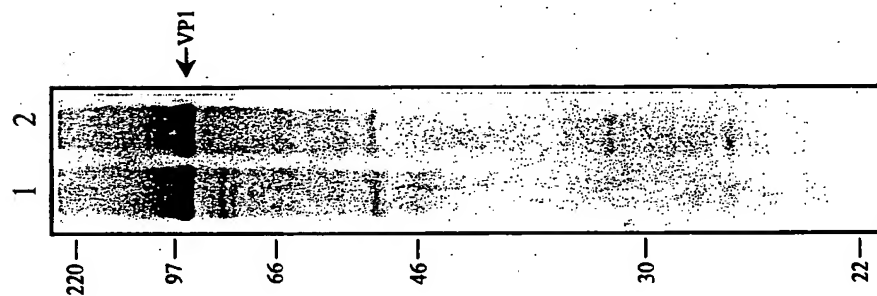


FIG. 23A

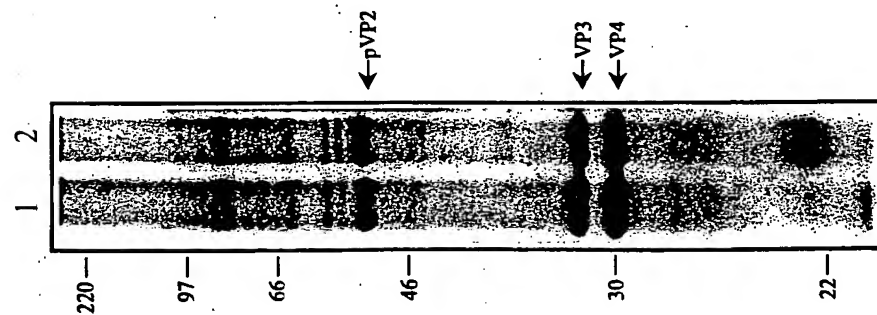
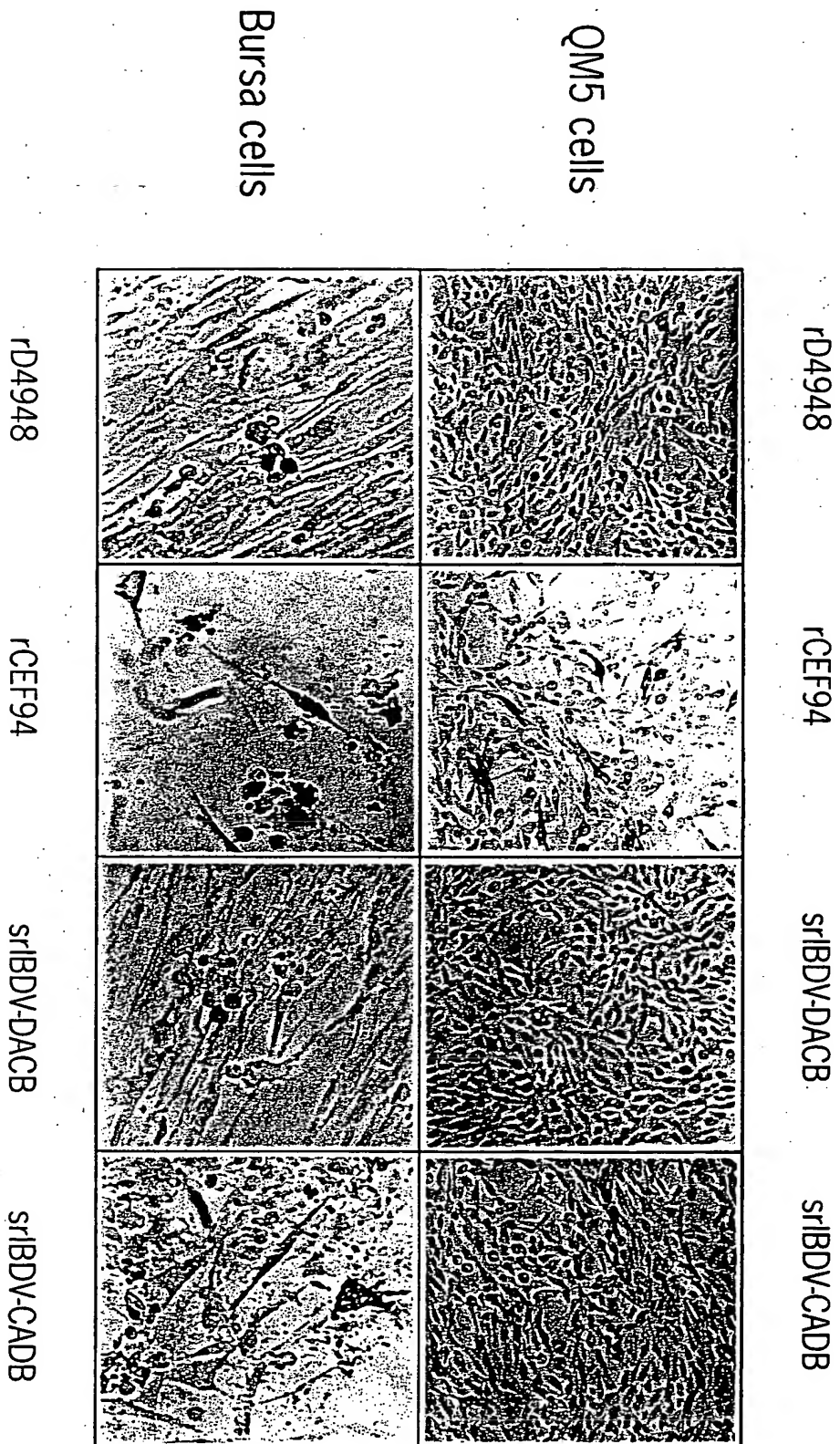


FIG. 24



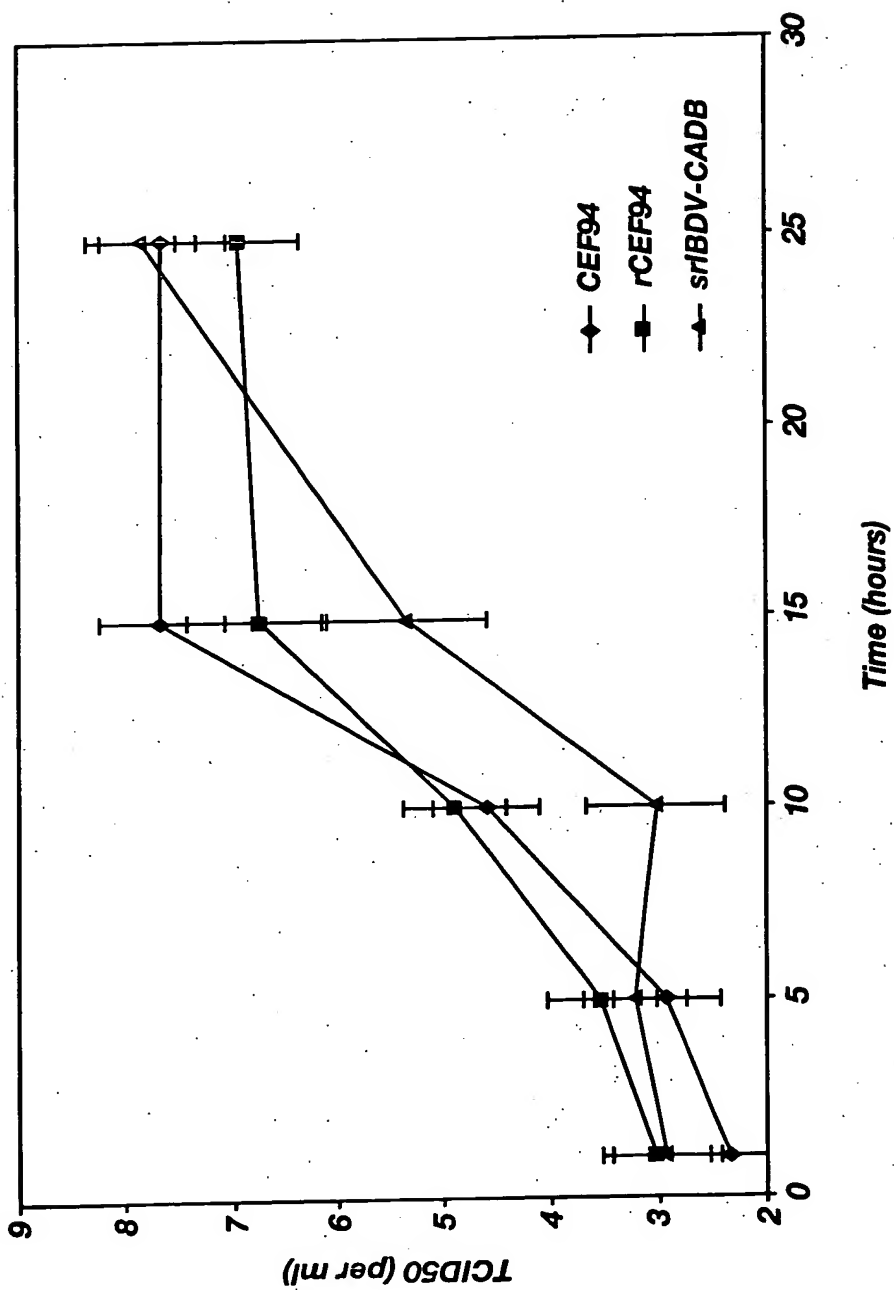


FIG. 25

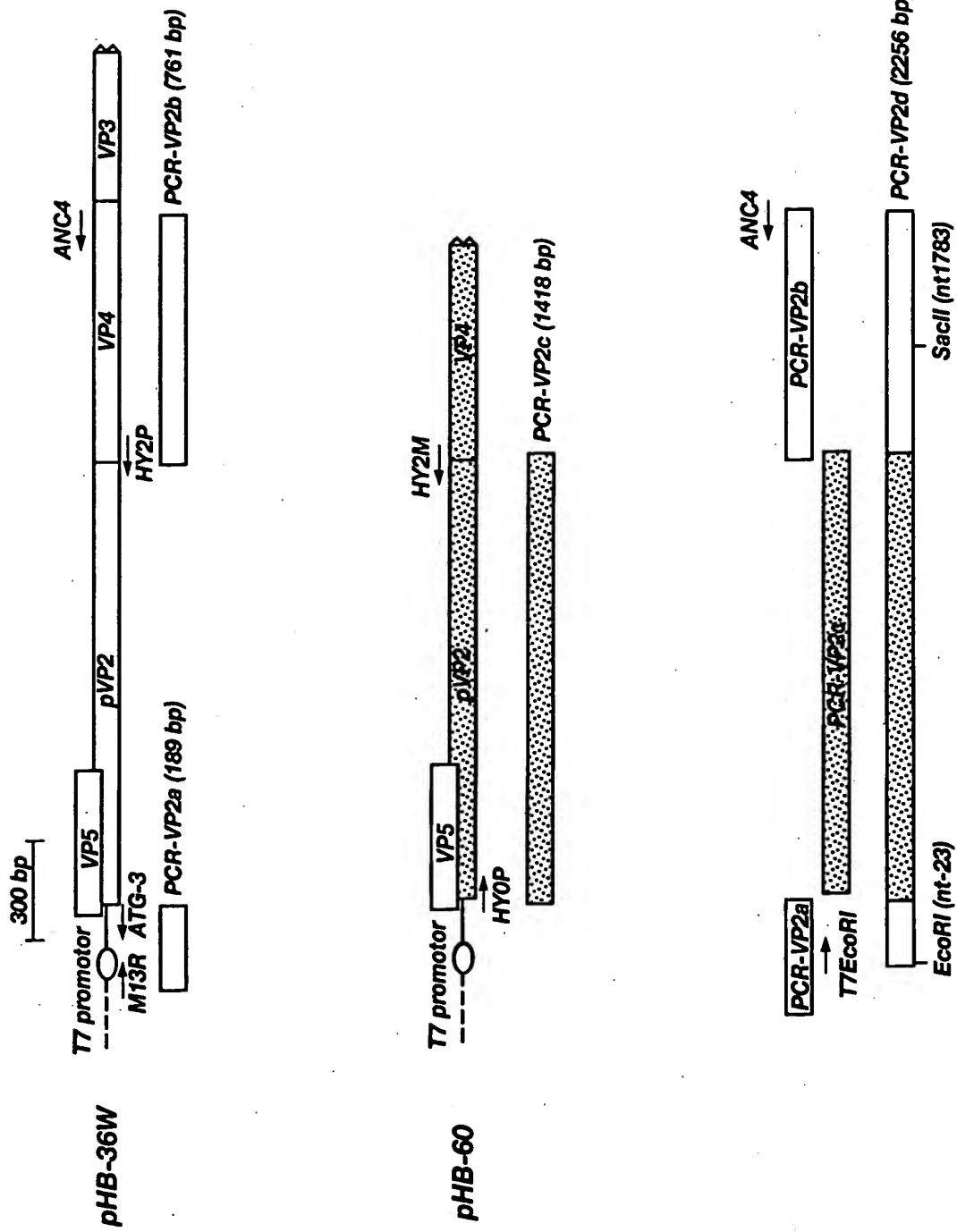


FIG. 26

FIG. 27

